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Application No.: 10/573,041 Reply dated November 17, 2011

Reply to Office Action of May 17, 2011

## **AMENDMENTS TO THE CLAIMS**

1-30. (Cancelled)

31. (Currently amended) A method of manufacturing a starch-based pigment or

filler comprising the steps of:

dissolving a starch derivative having a glass transition point of 60°C to 350°C in a

mixture of a solvent and water so that a solution comprising the starch derivative is formed;

bringing the solution into contact with a non-solvent in which the starch derivative is not

dissolved so as to precipitate the starch derivative from a dispersion which is formed from the

solvent and the water, so that a precipitate comprising the starch derivative and a liquid phase

comprising both the solvent and the water are formed;

removing the solvent from the liquid phase; and

separating the precipitate from the water and the non-solvent and recovering the

precipitate to obtain the starch-based pigment or filler, wherein

the solvent is ketone, [[and]]

the non-solvent is at least one non-solvent selected from the group consisting of water,

 $C_1$ - $C_6$  alkanol and  $C_1$ - $C_6$   $C_4$ - $C_{20}$  alkane,

the solvent is used in a minimum amount to dissolve the starch derivative or in an amount

of up to 30 % by weight more than the minimum amount,

a concentration of the starch derivative in the solution is 10-30 % by weight, and

an amount of the non-solvent used for precipitation is 0.5-10 times by weight of the

amount of the solvent.

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32. (Currently amended) The method according to claim 31, wherein the solvent is

used in a minimum amount to dissolve the starch derivative or in an amount of up to 20 % by

weight more than the minimum amount.

33. (Previously presented) The method according to claim 31, wherein the

concentration of the starch derivative of the solution is at least 1 % by weight.

34. (Cancelled)

35. (Previously presented) The method according to claim 31, wherein the viscosity

of the solution is 1-5 times the viscosity of the water.

36. (Previously presented) The method according to claim 31, wherein the starch

derivative has a glass transition point of at least 100°C, or is not broken down at the temperature

of 100°C.

37. (Previously presented) The method according to claim 31, wherein the starch

derivative is a starch ester.

38. (Previously presented) The method according to claim 37, wherein the starch

ester is an ester formed of starch and  $C_{1-4}$  alkane acid.

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39. (Previously presented) The method according to claim 37, wherein the starch

ester is a starch acetate.

(Previously presented) The method according to claim 37, wherein the starch 40.

ester is transglycosylated or hydroxy alkylated.

41. (Previously presented) The method according to claim 31, wherein a degree of

substitution of ester groups of the starch derivatives is chosen in a way that the starch derivative

is substantially insoluble in the non-solvent.

42. (Previously presented) The method according to claim 31, wherein after the

solvent is removed, the precipitate separated from the liquid phase does not contain such amount

of solvent residues that the solvent can be detected with a 300 MHz NMR device.

43. (Previously presented) The method according to claim 31, wherein the solvent

can be completely mixed with the non-solvent.

44. (Previously presented) The method according to claim 31, wherein the amount of

the non-solvent is 0.1-100 times the amount of the solvent by weight.

(Cancelled) 45.

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46. (Previously presented) The method according to claim 31, wherein the amount of

the non-solvent is 0.7-5 times by weight of the amount of the solvent.

47. (Previously presented) The method according to claim 31, wherein the non-

solvent is added, while mixing, to the solution of the starch derivative so as to produce spherical

pigment particles.

48. (Previously presented) The method according to claim 47, wherein the spherical

pigment particles have an average particle size of 90-1000 nanometers.

49. (Previously presented) The method according to claim 47, wherein fine particles

dispersed in the liquid phase are precipitated by salting out after the starch derivative is

precipitated from the solution.

50. (Previously presented) The method according to claim 31, wherein the solution is

added, while mixing, to the non-solvent so as to produce a coral-like, porous pigment.

51. (Previously presented) The method according to claim 50, wherein the pigment

or filler has a particle size of 1-100 micrometres and pores having an average diameter of 100-

500 nanometres.

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52. (Previously presented) The method according to claim 31, wherein the solution

comprising the starch derivate is brought into contact with the non-solvent in a turbulent

condition.

53-63. (Cancelled)

64. (Previously presented) The method of claim 31, wherein the non-solvent

comprises water.

65. (Previously presented) The method of claim 31, wherein the non-solvent

comprises a mixture comprising water and ethanol.

66. (Previously presented) The method of claim 31, wherein the non-solvent

comprises ethanol.